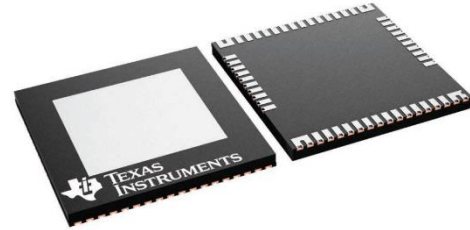





High current and power density,
Automotive qualified OptiMOS™ power
MOSFETs (10x10x2,3mm)



GaN FET modules with Integrated
Drivers, Protections, and Temperature
Reporting (12x12x1mm)

GaN INVERTER 230V/50Hz

POWER MODULE OF THE 2kW

-  2kVA single-phase inverter at the output
-  Enables high switching frequency
-  Reduces the size of magnetic and filtering components

The GaN inverter power module can be operated from the vehicle batteries 24V or from the auxiliary converter DC-link 680V DC. All key parameters are adjustable by software.

Power module contains an 1kW DC/DC input stage and a 2kVA single phase inverter at the output. Two power module units can be controlled by one common control system with 2x6 PWM signals.

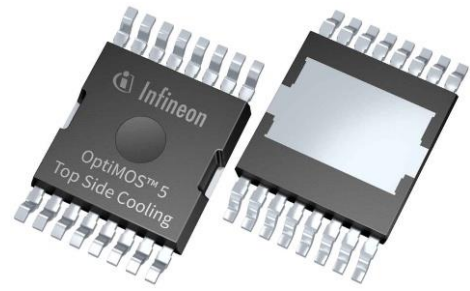
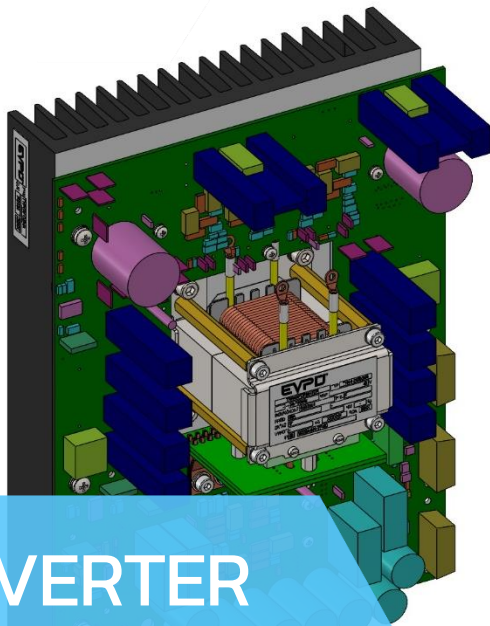
The selected power components, like the OptiMOS™ power MOSFETs, the Silicon Carbide (SiC) Schottky Diodes and the Intelligent GaN Power Modules allows to use high switching frequency and reduce the size of magnetic and filtering components.

Technical specification

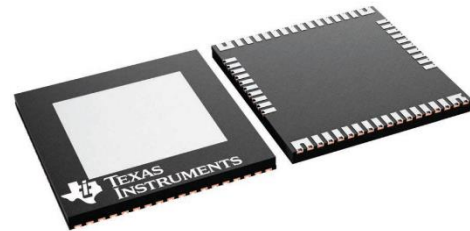
Nominal input voltage 1 <i>(Battery voltage 16,8V-30VDC)</i>	24V DC
Nominal input voltage 2 <i>(DC-link of the auxiliary converter)</i>	680V DC
Nominal output voltage	230V AC (230V AC, 50Hz, IT)
Nominal output current	4,35A / 8,7A
Nominal power <i>(1kVA from battery / 2kVA from DC-link)</i>	1kVA / 2kVA
Switching frequency	100kHz

Semiconductor components:

- DC/DC stage: OptiMOS™ power MOSFETs
- Rectifier: Silicon Carbide (SiC) Schottky Diodes
- Inverter: Gallium-Nitride (GaN) power modules






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